

A STUDY OF DOCTORAL DISSERTATIONS IN PHYSICAL EDUCATION AND SPORTS SCIENCES IN INDIA

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ABSTRACT

The purpose of this study was to evaluate the characteristics of PhD theses in physical education and sports sciences in India. The main source of data was from the Bibliography of Doctoral Dissertations published by A.I.U New Delhi (Social Sciences and Humanities) which periodically lists out the doctoral theses accepted by different universities in India and other sources. These doctoral dissertations were listed out and analysis was made. The year wise distribution of categories during the study period was also been made. All the doctoral dissertations awarded during the period of fifteen years i.e. 1976 to 1990. by Indian universities. The results of the study revealed that during the period 1986 to 1990, it was clear that there was sudden increase of research output in Physical Education and sport Sciences starting from the year 1986 and steadily increased again up to the year 1990. It is clearly evident from the table that the Madhya Pradesh State which is situated in central region of India has contributed overall more doctoral research work than other states. This is more significant, worth taking into considering as regards the overall contribution to the research productivity. The research productivity in Physical Education and sport Sciences was found comparatively high in Jiwaji University than other 22 universities of India. Dr. G. S. Chaudhery from kurukshetra has successfully guided more doctoral degrees in comparison to their top ranking guides. but the out put of research guides from M. P. state were more involved in carrying out research programmers with their research scholars. All the doctoral theses from 1976 to 1990 were awarded in English language and none of them in Hindi language. Males were more involved in research work than their counter parts in the field of physical education and sports sciences. Nearest fifty percent doctoral theses were awarded under the guidance of non-physical educationists, where as and more than fifty percent were awarded under the guidance of physical educationists. More attention was given by the guides on non-experimental research work performed by the researcher in the field of physical education and sports sciences. The game-specific study were found less than the allied sports sciences and physical education. Guides from very few states i.e. Kurukshetra, Chandigarh, M. P. and Maharastra were involved to increase the research productivity in the field of sports sciences and physical education. From this investigation, It was concluded that most of the theses were prepared in the department of physical education and sports sciences of Indian universities of multi-disciplinary in nature. The unique and multi-disciplinary nature of physical education and sports sciences seems to warrant the foundation of an Institute of physical education and Sports.

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INTRODUCTION

During the recent past, quite a number of research activities have been carried out in the universities and research institutions in various parts of the world. In India, due to the establishment of University Grants Commission, and other similar bodies and their active support, many students are caring out Ph.D. degrees.

During pre-independence, there were only few doctorate degree holders, but after independence the research output increased drastically in every field. In India about 125 universities and research institutions are offering Ph. D. programs in physical education and Sciences. Considering the available data, attempt was made to analyse research productivity of the various universities in India.

Recent research has shown that degenerative diseases begin in early childhood. "There's increasing evidence in youngsters of high cholesterol in the blood, high blood pressure, obesity and other conditions that are associated with heart disease, stroke and other disorders". The medical specialists blame deaths due to heart disease, cancer, and stroke largely on "changes in lifestyle characterized by factors over which doctors have little or no control".

Research suggests that regular physical activity, begun in childhood, may help prevent degenerative diseases. "The necessity of physical activity for a growing child is well-documented in terms of growth and fitness needs. Physical activity increases muscle tone, improves respiration and circulation, benefits digestion, aids in controlling obesity, promotes rehabilitation after illness and surgery, and stimulates proper growth and development. Physical benefits alone could be sufficient reason for supporting physical education programs. To know the growth of the research productivity (doctoral theses) in India and to identify the most predominant subject areas in the field of Physical education and sports sciences research, researcher surveyed the Doctoral dissertations in physical education and sports sciences in India.

Kanwal (1985) traced the development of physical education in India since 1947 with special reference to Punjab, and collected the viewpoints of personnel engaged in the physical education programme about the present status of physical education in India. The study revealed: 1. After independence an India National Association for Physical Education and a Nation Discipline Scheme were established. 2. Training centres were opened at various places to train instructors in physical education. 3. The national plan of physical education and recreation was started to improve the physical education programme in schools and colleges. 4. A national physical education drive was started to promote physical fitness among youngsters. 5. The Lakshmibai College of Physical Education was started at Gwalior as a model institute to train and educate physical education teachers. 6. Games at the international level like the 9th Asian Games were organized to promote awareness among the general public about physical education. 7. Various awards for youth were also introduced so as to provide motivation to young persons to strive for physical fitness. 8. In Punjab, departments of sports was started in all the universities. 9. A separate sports department was organized by the Government of Punjab to promote sports activities in the state. This department organized sports festivals at village, district and state levels. 10. Various sports associations were also organized at block and village levels to promote competition in sports. 11. Sports stadia were built, one for each district, so as to provide sports grounds for the

common people. 12. Voluntary agencies and the Nehru Yuvak Kendras also came forward to develop sports in Punjab. 13. The subjects who were administered the questionnaire opined that sports and physical education could not be separated and that trends in sports and physical education were quite healthy, meaningful and planned.

Silverman & Manson (2006) analysed all physical education dissertations with a teaching focus that were completed between 1985 and 1999. Most research on teaching dissertations addressed issues related to teacher effectiveness and focused on motor skill learning and attitude. There was an increase in qualitative methods from those reported in a previous study. While there were methodological advances, many dissertations still used methods that were not informed by the research methods literature.

Yaman, & Atay (2007) evaluated the characteristics of PhD theses in sports sciences. They concluded that most theses were prepared in Institutes of Health Sciences, but the subjects covered the field of training and movement sciences. The unique and multi-disciplinary nature of sports sciences seems to warrant the foundation of an Institute of Sports.

METHODOLOGY

Sources of Data

The main source of data was from the Bibliography of Doctoral Dissertations published by A.I.U New Delhi (Social Sciences and Humanities) which periodically lists out the doctoral theses accepted by different universities in India and other sources. These doctoral dissertations were listed out and analysis was made. The year wise distribution of categories during the study period was also been made. All the doctoral dissertations awarded during the period of fifteen years by Indian universities were considered for the study.

Design of the Study

The present study is structured as follows:

1. Chronological distribution of doctoral thesis in Physical Education and Sports Sciences.
2. State wise distribution of doctoral thesis in Physical Education and Sports Sciences.
3. University-wise of doctoral research. in Physical Education and Sports Sciences.
4. Top five ranking of the guides in Physical Education and Sports Sciences.
5. Language wise distribution of research. in Physical Education and Sports Sciences.
6. Gender-wise distribution of doctoral thesis in Physical Education and Sports Sciences.
7. Profession-wise distribution of doctoral thesis in Physical Education and Sports Sciences.
8. Experimental and non-experimental distribution of doctoral thesis in Physical Education and Sports Sciences.
9. Subject-wise distribution of doctoral thesis in Physical Education and Sports Sciences.
10. Guide wise analysis of doctoral thesis in Physical Education and Sports Sciences.

Collection & Presentation of Data

The data for the present study was collected from two authoritative sources. The first one is the data published in the University News: a weekly from the Association of Indian

Universities available in the nearest universities and second one is from the doctoral dissertations published by A.I.U New Delhi, Internet web sites also by personal visits. and chronological list of doctoral degrees awarded in Indian universities during 1976 to 1990 published by the Association of Indian Universities, New Delhi. have also refer to obtain pertinent data.

The data were presented in the tabular form under 10 heads viz. chronological growth, , state-wise, university-wise, subject-wise distribution, language-wise, guide-wise, profession-wise, gender-wise, language-wise, experimental and non-experimental distribution of doctoral theses and top five ranking of research guides.

DATA ANALYSIS AND INTERPRETATION

There are as many as 96 doctoral degrees awarded so far in the physical education and sports sciences. The authors have made an attempt to consolidate all the doctoral degrees awarded by various universities in India. The data were analysed by using percentage statistics and presented in Table 1 to 10

TABLE 1
CHRONOLOGICAL GROWTH OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES

S. N0	Academic Session	Number of Ph. D theses	Percentage
1	1976	01	01.042 %
2	1977	02	02.083 %
3	1978	02	02.083 %
4	1979	00	00.00 %
5	1980	03	3.125 %
6	1981	03	3.125 %
7	1982	00	00.00 %
8	1983	00	00.00 %
9	1984	00	00.00 %
10	1985	03	3.125 %
11	1986	07	07.291%
12	1987	15	15.625 %
13	1988	19	19.791 %
14	1989	16	16.644 %
15	1990	25	26.041 %
	Total	96	100 %

It is clearly evident from the Table 1 that research activity was quite rare till 1985 and all of a sudden, the research productivity increased from the year 1987. This was due to the need and emphasis on recruiting qualified physical education teacher and sports officers mainly in the universities and colleges. It was also true that University Grants Commission started giving preference to the candidates who have done research in Physical Education and sport Sciences. The present situation is that on an average 16.40 % doctoral theses are being

awarded Ph.D. degrees every year. During the period 1986 to 1990. From this it is clear that there is sudden increase of research output in Physical Education and sport Sciences starting from the year 1986 and steadily increased again up to the year 1990.

TABLE 2

**STATE-WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND
SPORT SCIENCES**

S. N0	State	Number of Ph. D.s	Percentage
1	Assam	01	01.042 %
2	Andhra Pradesh	01	01.042 %
3	Bihar	02	02.083 %
4	Delhi	02	02.083 %
5	Hariyana	18	18.750 %
6	Kerala	01	01.042 %
7	Karnataka	01	01.042 %
8	M.P.	34	35.416 %
9	Maharastra	05	05.208 %
10	Madras	03	03.125 %
11	Punjab	18	18.750 %
12	Uttar Pradesh	02	02.083 %
13	West Bengal	01	01.042 %
Total		96	100 %

Table 2 shows state-wise distribution of research output in Physical Education and sport Sciences. It is clearly evident from the table that the Madhya Pradesh State which is situated in central region of India has contributed 34 doctoral research work, representing 35.416 percent of the overall output of research in India followed by Punjab (18.750%), Hariyana (18.750%), Maharastra (05.208 %), Madras (03.125 %), Delhi(02.083 %), Uttar Pradesh(02.083 %), Bihar(02.083 %), Assam(01.042 %), A. P. (01.042 %) Kerala (01.042 %), Karnataka (01.042 %) and West Bengal (01.042 %). This is more significant, worth taking into considering as regards the overall contribution to the research productivity.

TABLE 3**UNIVERSITY-WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES**

S. NO	University	Number of Ph. D.s	Percentage
1	Punjab University,	14	14.583 %
2	Punjabi University	04	04.166 %
3	University of Patna	01	01.042 %
4	Amravati University	04	04.166 %
5	Gwahati University	01	01.042 %
6	Kurukshetra University	18	18.750 %
7	University of Delhi	01	01.042 %
8	Jiwaji University	33	34.375 %
9	Calcutta University	01	01.042 %
10	Osmania University	01	01.042 %
11	Meerut University	01	01.042 %
12	Dr. B. A. Marathwara University	01	01.042 %
13	Annamalai University	03	03.125 %
14	Pt Ravishanker University, Raipur	01	01.042 %
15	Andhra University	01	01.042 %
16	Kalyani University	01	01.042 %
17	Bhartihar University, Koyamtoor	01	01.042 %
18	Banglore University	01	01.042 %
19	Bakresi University, Mumbai	01	01.042 %
20	Jaffer Khan Patel University, Madras	01	01.042 %
21	University of Kerala	01	01.042 %
22	Madras Uuniversity, Madras	02	02.083 %
23	Nagpur University	01	01.042 %
24	Kanpur University	01	01.042 %
25	Vansthal Vidhyapeeth	01	01.042 %

Table 3. depicts the university-wise research output in the form of Ph.D theses. Among the top 25 Indian universities, considering the number of doctoral degrees, Jiwaji University stands first with 34 Ph.D theses, representing 34.375 percent of the total out put. Next to Kurukshetra University with 18 theses occupies the second place, representing 18.750 percent. Next to Punjab University with 14 theses occupies the third place, representing 14.583 percent. However, the three top universities in India i.e. Jiwaji University, Kurukshetra University and Punjab University have contributed 66 Ph.D. theses, representing 68.75 percent in the over-all out put of research. Here, it is worth mentioning that though the number of universities and posts of physical education teacher are at large in these States, the research productivity in Physical Education and sport Sciences is comparatively in high than other 22 universities in the state of India .

TABLE 4
TOP FIVE RANKING OF THE GUIDES

S.N0.	Ranking of Guides	Name of the Guides	Name of State	Number of Ph. D.s awarded
1.	01	Dr. G. S. Chaudhery	Kurukshetra	06
2.	02	Dr. A. K. Uppal	M. P.	05
3.	02	Dr. (Mrs) S. Talwar	Kurukshetra	05
4.	02	Dr. T. S. Brar	M. P.	05
5.	03	Dr. G. S. Sandhu	Chhandigarh	04
6.	03	Dr. N. N. Mall	M. P.	04
7.	03	Dr. R. N. Dey	M. P.	04
8.	03	Dr. (Mrs) T. Mall	M. P.	04
9.	03	Dr. B. S. Brar	M. P.	04
10.	04	Dr.(Mrs) S. Bambah	Chhandigarh	03
11.	04	Dr. S. H. Deshpande	Amaravti	03
12.	04	Dr.(Mrs) J. Bhullar	Chhandigarh	03
13.	05	Dr. J. S. Narooka	M. P.	02
14.	05	Dr. K. K. Verma	Kurukshetra	02
15.	05	Dr. C. L. Kundu	Kurukshetra	02
16.	05	Dr. A. K. Dutta	M. P.	02
17.	05	Dr. S. P. Malhotra	Kurukshetra	02

Table 4 projects the guide-wise output of doctoral theses. Dr. G. S. Chaudhery has successfully guided for 6 doctoral degrees. Dr. A. K. Uppal, Dr. (Mrs) S. Talwar and Dr. T. S. Brar are in the second place with 5 doctoral theses by each. It is worth nothing here that among the top seventeen guides, faculty guides are five from the state of Kurukshetra, seven from M. P., four from Chandigarh and one from Amaravati. This clearly indicates that research guides from M. P. state are more involved in carrying out research programmes with their research scholars and hence the output is also considerably more.

TABLE 5
LANGUAGE-WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES

S.N0.	Language	Number of Ph. D. s	Percentage
1.	Hindi	00	00.00%
2.	English	96	100%
	Total	96	100

Table 5 reveals the language wise distribution of Ph.D. theses. It was found that, out of 96 theses, all the 96 theses were awarded in English language and none of them in Hindi language in the field of physical education and sports sciences.

TABLE 6
GENDER-WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES

S.N0.	Gender	Number of Ph. D. s	Percentage
1.	Males	79	82.292%
2.	Female	17	17.708 %
	Total	96	100 %

Table 6 reveals the Gender-wise distribution of PhD theses. It was found that, out of 96 theses 79 theses (82.292%) were awarded for male researchers and rest of 17

theses(17.108%) were awarded for female researchers in the field of physical education and sports sciences.

TABLE 7
PROFESSION-WISE DISTRIBUTION OF Ph. D. THESES GUIDE IN PHYSICAL EDUCATION AND SPORT SCIENCES

S.NO.	Profession	Number of Guides	Percentage
1.	Non-Physical educationists	24	43.636 %
2.	Physical Educationists	31	56.364 %
	Total	55	100 %

Table 7 reveals the Profession-wise distribution of PhD theses. It was found that, out of 96 theses, 24 theses (46.636%) were awarded under the guidance of non-physical educationists and rest of 31 theses (56.364%) were awarded under the guidance of physical educationists in the field of physical education and sports sciences.

TABLE 8
EXPERIMENTAL AND NON-EXPERIMENTAL BASIS DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES

S. NO	Type of Study	Number of Ph. D. s Awarded	Percentage
1	Experimental Study	29	30.208 %
2	Non-Experimental Study	67	69.792 %
	Total	96	100 %

Table 8 reveals the experimental and non-experimental basis distribution of PhD theses. It was found that, out of 96 theses, 29 theses (30.208%) were experimental study and rest of 67 theses (69.792%) were non-experimental type of study awarded in the field of physical education and sports sciences.

TABLE 9
SUBJECT-WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND SPORT SCIENCES

S. NO	Subject	Number of Ph. D. s Awarded	Percentage
1	Game specific	15	15.625 %
2	Allied sports Sciences & Physical Education	81	84.375%
	Total	96	100 %

Table 9 reveals the subject wise distribution of successful doctorates awarded in the field of academic libraries. All 96 theses have been distributed in 19 subject areas. Out of 96 theses, 15 theses (15.625%) were awarded in the field of game-specific study and 81 theses (84.375%) were awarded related to allied sports sciences and physical education.

TABLE 10
GUIDE--WISE DISTRIBUTION OF Ph. D. THESES IN PHYSICAL EDUCATION AND
SPORT SCIENCES

S. NO	Name of Guide	University	Number of Ph. D.s
1	Dr. G. S. Chaudhery	Kurukshetra University, Kurukshetra	06
2	Dr. A. K. Uppal	Jiwaji University, Gwalior	05
3	Dr. (Mrs) S. Talwar	Kurukshetra University	05
4	Dr. T. S. Brar	Jiwaji University, Gwalior	05
5	Dr. G. S. Sandhu	Punjab University, Chandigarh	04
6	Dr. N. N. Mall	Jiwaji University, Gwalior	04
7	Dr. R. N. Dey	Jiwaji University, Gwalior	04
8	Dr. (Mrs) T. Mall	Jiwaji University, Gwalior	04
9	Dr. B. S. Brar	Jiwaji University, Gwalior	04
10	Dr. (Mrs) S. Bambah	Punjab University, Chandigarh	03
11	Dr. S. H. Deshpande	S. G. B. Amravati University, Amravati	03
12	Dr. (Mrs) J. Bhullar	Punjab University, Chandigarh	03
13	Dr. J. S. Narooka	Jiwaji University, Gwalior	02
14	Dr. K. K. Verma	Kurukshetra University, Kurukshetra	02
15	Dr. C. L. Kundu	Kurukshetra University, Kurukshetra	02
16	Dr. A. K. Dutta	Jiwaji University, Gwalior	02
17	Dr. S. P. Malhotra	Kurukshetra University, Kurukshetra	02
18	Dr. B. L. Gupta	Punjab University, Chandigarh	01
19	Dr. J. Joshi	Punjab University, Chandigarh	01
20	Dr. S. B. Kakkar	Punjab University, Chandigarh	01
21	Dr. R. L. Prasad	Patna University, Patna	01
22	Dr. S. W. Ganokar	S. G. B. Amravati University, Amravati	01
23	Dr. (Mrs) Renu Devi	Gauhati University, Gauhati	01
24	Dr. Y. P. Aggarwal	Kurukshetra University, Kurukshetra	01
25	Prof. Uday Shanker	Kurukshetra University, Kurukshetra	01
26	Dr. J. Mohan	Jiwaji University, Gwalior	01
27	Dr. G. P. Mehrotra	University of Delhi	01
28	Dr. J. C. Sharma	Punjab University, Chandigarh	01
29	Dr. Pallav Sengupta	Calcutta University	01
30	Dr. C. Giri	Punjabi University, Patiala	01
31	Dr. Viswanatha Muddu	Osmania University, Hyderabad	01
32	Dr. M. L. Kamlesh	Punjabi University, Patiala	01
33	Dr. M. Robson	Jiwaji University, Gwalior	01
34	Dr. L. K. Oad	Banisthali University, Banisthali	01
35	Dr. P. Rama Rao	Madras University, Madras	01
36	Dr. G. P. Mehrotra	University of Delhi	01
37	Dr. V. A. Vaidhya	S. G. B. Amravati University, Amravati	01
38	Dr. (Mrs) A. Sandhu	Jiwaji University, Gwalior	01
39	Dr. (Mrs) S. V. Kaldate	Dr. B. A. Marathwara University	01
40	Dr. R. D. Helodae	Pt. Ravi Shanker Shukla University, Raipur	01
41	Dr. A. K. Bhattacharaya	Kalyani University, Kalyani	01

S. NO	Name of Guide	University	Number of Ph. D.s
42	Dr. S. Purshothaman	Bhartihar University, Koyamtoor	01
43	Dr. S. C. B. Rangan	Banglore University, Banglore	01
44	Dr.N. K. Upasani	Mumbai University, Mumbai	01
45	Dr. H. S. Shodhi	Punjabi University, Patiala	01
46	Dr.J. David Manual Raj	Madras University, Madras	01
47	Dr. A. Sukumaran Nayar	University of Kerala, Thiruvanthpuram	01
48	Dr.G. C. Sharma	Jiwaji University, Gwalior	01
49	Dr. N. N. Laha	Jiwaji University, Gwalior	01
50	Dr. S. L. Kaushik	Punjab University, Chandigarh	01
51	Dr. P. Anatha Krishanan	Madras University, Madras	01
52	Dr. M. Gharota	Nagpur University, Nagpur	01
53	Dr. L. P. Mehrotra	Kanpur University, Kanpur	01
54	Dr. Haman Singh	Punjab University, Chandigarh	01
55	Dr. S. R. Gangopadhaya	Jiwaji University, Gwalior	01

Table 10 indicates that 96 research scholars were guided by as many as 55 guides. Dr. G. S. Chaudhery guided 06 research scholars, which is highest number and 05 research scholars were guided by the Dr. A. K. Uppal followed by Dr. (Mrs) S. Talwar and Dr. T. S. Brar. Dr. G. S. Sandhu, Dr. N. N. Mall, Dr. R. N. Dey, and Dr. (Mrs) T. Mall who have guided 4 research scholars by each. Dr.(Mrs) S. Bambah, Dr. S. H. Deshpande, and Dr.(Mrs) J. Bhullar have guided 3 research scholars by each. Dr. J. S. Narooka followed by Dr. J. S. Narooka, Dr. C. L. Kundu, Dr. A. K. Dutta, and Dr. S. P. Malhotra have guided 2 research scholars by each. Rest of the guide have guided only one research scholar by each. Co-guides were very few and are not included in the list.

CONCLUSIONS

Research is the key to academic achievement and it is also a base for further study. As per previous work and on the basis of collected data, it is found that, research activities are increasing every year. We hope to see this trend continue in the years to come. For the benefit of the student and research scholars of physical education and sports sciences full text databases of PhD theses should be compiled by the universities through cooperative efforts. We hope it will be possible in future.

Within the limitations of the study and on the basis of analysis of data the following conclusions may be drawn:

1. During the period 1986 to 1990, it was clear that there was sudden increase of research output in Physical Education and sport Sciences starting from the year 1986 and steadily increased again up to the year 1990.
2. It is clearly evident from the table that the Madhya Pradesh State which is situated in central region of India has contributed overall more doctoral research work than other states. This is more significant, worth taking into considering as regards the overall contribution to the research productivity.
3. The research productivity in Physical Education and sport Sciences was found comparatively high in Jiwaji University than other 22 universities of India.

4. Dr. G. S. Chaudhery from kurukshetra has successfully guided more doctoral degrees in comparison to their top ranking guides. but the out put of research guides from M. P. state were more involved in carrying out research programmers with their research scholars.
5. All the doctoral theses from 1976 to 1990 were awarded in English language and none of them in Hindi language.
6. Males were more involved in research work than their counter parts in the field of physical education and sports sciences.
7. Nearest fifty percent doctoral theses were awarded under the guidance of non-physical educationists, where as and more than fifty percent were awarded under the guidance of physical educationists.
8. More attention was given by the guides on non-experimental research work performed by the researcher in the field of physical education and sports sciences.
9. The game-specific study were found less than the allied sports sciences and physical education.
10. Guides from very few states i.e. Kurukshetra, Chandigarh, M. P. and Maharastra were involved to increase the research productivity in the field of sports sciences and physical education.

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